

# Sahjendra N Singh

## List of Publications by Year in descending order

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121  
papers

2,495  
citations

186209

28  
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243529

44  
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122  
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122  
docs citations

122  
times ranked

936  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct Adaptive and Neural Control of Wing-Rock Motion of Slender Delta Wings. <i>Journal of Guidance, Control, and Dynamics</i> , 1995, 18, 25-30.	1.6	134
2	Adaptive Control of Chaos in Lorenz System. <i>Journal of Dynamical and Control Systems</i> , 1997, 7, 143-154.	0.4	118
3	Adaptive Output Feedback Control of a Nonlinear Aeroelastic Structure. <i>Journal of Guidance, Control, and Dynamics</i> , 2000, 23, 1109-1116.	1.6	103
4	Adaptive output feedback control of spacecraft with flexible appendages by modeling error compensation. <i>Acta Astronautica</i> , 2004, 54, 229-243.	1.7	90
5	State-dependent Riccati equation-based robust dive plane control of AUV with control constraints. <i>Ocean Engineering</i> , 2007, 34, 1711-1723.	1.9	85
6	Invertibility and trajectory control for nonlinear maneuvers of aircraft. <i>Journal of Guidance, Control, and Dynamics</i> , 1994, 17, 192-200.	1.6	84
7	Variable structure slewing control and vibration damping of flexible spacecraft. <i>Acta Astronautica</i> , 1991, 25, 1-9.	1.7	71
8	Simplified adaptive control of an orbiting flexible spacecraft. <i>Acta Astronautica</i> , 2007, 61, 575-589.	1.7	65
9	Adaptive control of feedback linearizable nonlinear systems with application to flight control. <i>Journal of Guidance, Control, and Dynamics</i> , 1996, 19, 871-877.	1.6	64
10	Adaptive Output Feedback Control of an Aeroelastic System with Unstructured Uncertainties. <i>Journal of Guidance, Control, and Dynamics</i> , 2001, 24, 502-509.	1.6	56
11	Nonlinear predictive control of feedback linearizable systems and flight control system design. <i>Journal of Guidance, Control, and Dynamics</i> , 1995, 18, 1023-1028.	1.6	54
12	Multi-Input Noncertainty-Equivalent Adaptive Control of an Aeroelastic System. <i>Journal of Guidance, Control, and Dynamics</i> , 2010, 33, 1451-1460.	1.6	51
13	Adaptive and neural control of a wing section using leading- and trailing-edge surfaces. <i>Aerospace Science and Technology</i> , 2005, 9, 161-171.	2.5	50
14	Output Feedback Variable Structure Adaptive Control of an Aeroelastic System. <i>Journal of Guidance, Control, and Dynamics</i> , 1998, 21, 830-837.	1.6	49
15	Control of Unsteady Aeroelastic System via State-Dependent Riccati Equation Method. <i>Journal of Guidance, Control, and Dynamics</i> , 2005, 28, 78-84.	1.6	48
16	Input-output invertibility and sliding mode control for close formation flying of multiple UAVs. <i>International Journal of Robust and Nonlinear Control</i> , 2000, 10, 779-797.	2.1	47
17	Output Feedback Form and Adaptive Stabilization of a Nonlinear Aeroelastic System. <i>Journal of Guidance, Control, and Dynamics</i> , 2002, 25, 725-732.	1.6	47
18	State feedback control of an aeroelastic system with structural nonlinearity. <i>Aerospace Science and Technology</i> , 2003, 7, 23-31.	2.5	45

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19	Noncertainty-Equivalent Adaptive Missile Control via Immersion and Invariance. <i>Journal of Guidance, Control, and Dynamics</i> , 2010, 33, 655-665.	1.6	45
20	Inverse Trajectory Control and Zero Dynamics Sensitivity of an Elastic Manipulator. , 1991, , .		43
21	Optimal Feedback Control of Vortex Shedding Using Proper Orthogonal Decomposition Models. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2001, 123, 612-618.	0.8	40
22	adaptive control of flexible spacecraft despite disturbances. <i>Acta Astronautica</i> , 2012, 80, 24-35.	1.7	40
23	Output feedback non-linear decoupled control synthesis and observer design for manoeuvring aircraft. <i>International Journal of Control</i> , 1980, 31, 781-806.	1.2	37
24	Output feedback nonlinear control of an aeroelastic system with unsteady aerodynamics. <i>Aerospace Science and Technology</i> , 2004, 8, 195-205.	2.5	35
25	Adaptive optimal control of an autonomous underwater vehicle in the dive plane using dorsal fins. <i>Ocean Engineering</i> , 2006, 33, 404-416.	1.9	35
26	Global Robust Control of an Aeroelastic System Using Output Feedback. <i>Journal of Guidance, Control, and Dynamics</i> , 2007, 30, 271-275.	1.6	35
27	Variable Structure Adaptive Control of Wing-Rock Motion of Slender Delta Wings. <i>Journal of Guidance, Control, and Dynamics</i> , 1998, 21, 251-256.	1.6	34
28	Nonlinear Adaptive Close Formation Control of Unmanned Aerial Vehicles. <i>Journal of Dynamical and Control Systems</i> , 2000, 10, 179-194.	0.4	33
29	Immersion- and Invariance-Based Adaptive Control of a Nonlinear Aeroelastic System. <i>Journal of Guidance, Control, and Dynamics</i> , 2009, 32, 1100-1110.	1.6	31
30	Nonlinear Inverse and Predictive End Point Trajectory Control of Flexible Macro-Micro Manipulators. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1997, 119, 412-420.	0.9	28
31	Decentralized nonlinear robust control of UAVs in close formation. <i>International Journal of Robust and Nonlinear Control</i> , 2003, 13, 1057-1078.	2.1	27
32	Modular Adaptive Control of a Nonlinear Aeroelastic System. <i>Journal of Guidance, Control, and Dynamics</i> , 2003, 26, 443-451.	1.6	26
33	Synchronization of Animal-Inspired Multiple High-Lift Fins in an Underwater Vehicle Using Cerebellar Dynamics. <i>IEEE Journal of Oceanic Engineering</i> , 2008, 33, 563-578.	2.1	26
34	Robust Higher-Order Sliding-Mode Finite-Time Control of Aeroelastic Systems. <i>Journal of Guidance, Control, and Dynamics</i> , 2014, 37, 1664-1671.	1.6	24
35	Adaptive Control of Multi-Input Aeroelastic System with Constrained Inputs. <i>Journal of Guidance, Control, and Dynamics</i> , 2015, 38, 2337-2350.	1.6	24
36	Optimal Yaw Regulation and Trajectory Control of Biorobotic AUV Using Mechanical Fins Based on CFD Parametrization. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2006, 128, 687-698.	0.8	23

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37	adaptive control of a nonlinear aeroelastic system despite gust load. JVC/Journal of Vibration and Control, 2013, 19, 1807-1821.	1.5	23
38	Limit Cycle Oscillation and Orbital Stability in Aeroelastic Systems with Torsional Nonlinearity. Nonlinear Dynamics, 2003, 31, 435-450.	2.7	22
39	Multi-variable adaptive back-stepping control of submersibles using SDU decomposition. Ocean Engineering, 2009, 36, 158-167.	1.9	22
40	Finite-time sliding mode and super-twisting control of fighter aircraft. Aerospace Science and Technology, 2018, 82-83, 487-498.	2.5	22
41	Adaptive Variable Structure Control of Aircraft with an Unknown High-Frequency Gain Matrix. Journal of Guidance, Control, and Dynamics, 2008, 31, 194-203.	1.6	21
42	Variable-Structure Model Reference Adaptive Formation Control of Spacecraft. Journal of Guidance, Control, and Dynamics, 2012, 35, 104-115.	1.6	21
43	Variable structure trajectory control of an elastic robotic arm. Journal of Field Robotics, 1993, 10, 23-44.	0.7	18
44	Inverse Force and Motion Control of Constrained Elastic Robots. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1995, 117, 374-383.	0.9	18
45	Biologically-Inspired Bodies Under Surface Waves—Part 2: Theoretical Control of Maneuvering. Journal of Fluids Engineering, Transactions of the ASME, 1999, 121, 479-487.	0.8	18
46	ADAPTIVE FEEDBACK LINEARIZING CONTROL OF CHUA'S CIRCUIT. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 1599-1604.	0.7	18
47	Adaptive input-output feedback linearizing yaw plane control of BAUV using dorsal fins. Ocean Engineering, 2006, 33, 1413-1430.	1.9	17
48	Attractive manifold-based adaptive solar attitude control of satellites in elliptic orbits. Acta Astronautica, 2011, 68, 185-196.	1.7	17
49	Flexible spacecraft maneuver: Inverse attitude control and modal stabilization. Acta Astronautica, 1988, 17, 1-9.	1.7	16
50	Immersion-and Invariance-Based Adaptive Control of Asteroid-Orbiting and - Hovering Spacecraft. Journal of the Astronautical Sciences, 2019, 66, 537-553.	0.8	16
51	Dual mode control of an elastic robotic arm: non-linear inversion and stabilization by pole assignment. International Journal of Systems Science, 1990, 21, 1185-1204.	3.7	15
52	Sliding mode of control of flexible spacecraft under disturbance torque. International Journal of Systems Science, 1990, 21, 1755-1771.	3.7	14
53	Variable Structure Control of Unsteady Aeroelastic System with Partial State Information. Journal of Guidance, Control, and Dynamics, 2005, 28, 568-573.	1.6	14
54	Nonlinear attitude control of flexible spacecraft under disturbance torque. Acta Astronautica, 1986, 13, 507-514.	1.7	13

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55	$\hat{\alpha}_1$ adaptive control of an aeroelastic system with unsteady aerodynamics and gust load. JVC/Journal of Vibration and Control, 2018, 24, 303-322.	1.5	13
56	Adaptive and Supertwisting Adaptive Spacecraft Orbit Control Around Asteroids. Journal of Aerospace Engineering, 2019, 32, .	0.8	13
57	Feedback Linearization of Differential-Algebraic Systems and Force and Position Control of Manipulators. , 1993, , .		12
58	Robust control of chaos in Chua's circuit based on internal model principle. Chaos, Solitons and Fractals, 2007, 31, 1095-1107.	2.5	12
59	Nonlinear regulation of Space Station - A geometric approach. Journal of Guidance, Control, and Dynamics, 1994, 17, 242-249.	1.6	11
60	Variable Structure Adaptive Force Tracking Control of a Cantilever Beam Using a Piezoelectric Actuator. JVC/Journal of Vibration and Control, 2000, 6, 1029-1043.	1.5	11
61	Noncertainty-Equivalent Adaptive Wing-Rock Control via Chebyshev Neural Network. Journal of Guidance, Control, and Dynamics, 2014, 37, 123-133.	1.6	11
62	Wing rock control by finite-form adaptation. JVC/Journal of Vibration and Control, 2016, 22, 2687-2703.	1.5	11
63	Noncertainty-Equivalence Spacecraft Adaptive Formation Control with Filtered Signals. Journal of Aerospace Engineering, 2017, 30, .	0.8	11
64	Experimental two-axis vibration suppression and control of a flexible robot arm. Journal of Field Robotics, 1993, 10, 321-343.	0.7	10
65	Output Feedback Modular Adaptive Control of a Nonlinear Prototypical Wing Section. Nonlinear Dynamics, 2004, 37, 357-373.	2.7	10
66	Multi-input submarine control via $\hat{\alpha}_1$ adaptive feedback despite uncertainties. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2014, 228, 330-347.	0.7	10
67	A Higher-Order Sliding Mode Three-Axis Solar Pressure Satellite Attitude Control System. Journal of Aerospace Engineering, 2016, 29, 04015019.	0.8	10
68	Output feedback form of Chua's circuit and modular adaptive control of chaos using single measurement. Chaos, Solitons and Fractals, 2006, 28, 724-738.	2.5	9
69	Noncertainty-equivalent multi-variable adaptive control of submersibles using filtered signals. Ocean Engineering, 2012, 53, 98-110.	1.9	9
70	$\hat{\alpha}_1$ adaptive attitude control of satellites in elliptic orbits using solar radiation pressure. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2014, 228, 611-626.	0.7	9
71	Robust Finite-Time Continuous Control of an Unsteady Aeroelastic System. Journal of Guidance, Control, and Dynamics, 2018, 41, 978-986.	1.6	9
72	Nonlinear rotational maneuver and vibration damping of NASA SCOLE system. Acta Astronautica, 1994, 32, 211-220.	1.7	8

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73	Adaptive Feedback Linearizing Control of Proper Orthogonal Decomposition Nonlinear Flow Models. <i>Nonlinear Dynamics</i> , 2002, 28, 71-81.	2.7	8
74	Limit Cycles and Domain of Stability in Unsteady Aeroelastic System. <i>Journal of Guidance, Control, and Dynamics</i> , 2004, 27, 728-732.	1.6	8
75	Immersion and invariance-based adaptive wing rock control with nonlinear terminal manifold. <i>Nonlinear Dynamics</i> , 2017, 88, 955-972.	2.7	8
76	Generalized Composite Noncertainty-Equivalence Adaptive Control of Orbiting Spacecraft in Vicinity of Asteroid. <i>Journal of the Astronautical Sciences</i> , 2020, 67, 1021-1043.	0.8	8
77	Predictive end-point trajectory control of elastic manipulators. <i>Journal of Field Robotics</i> , 1996, 13, 561-569.	0.7	7
78	Variable structure control of a robotic arm in the presence of uncertainty. <i>Journal of Field Robotics</i> , 1989, 6, 111-132.	0.7	6
79	OUTPUT FEEDBACK ADAPTIVE VARIABLE STRUCTURE CONTROL OF CHAOS IN LORENZ SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2002, 12, 571-582.	0.7	6
80	Adaptive Servoregulation of a Projectile Fin Using Piezoelectric Actuator. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2007, 129, 100-104.	0.9	6
81	Oscillatory adaptive yaw-plane control of biorobotic autonomous underwater vehicles using pectoral-like fins. <i>Applied Bionics and Biomechanics</i> , 2008, 4, 137-147.	0.5	6
82	Nonlinear adaptive trajectory control of multi-input multi-output submarines with input constraints. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , 2016, 230, 164-183.	0.7	6
83	MODULAR ADAPTIVE CONTROL OF CHAOS IN CHUA'S CIRCUIT. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005, 15, 2973-2984.	0.7	5
84	Three-axis L1 adaptive attitude control of spacecraft using solar radiation pressure. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2015, 229, 407-422.	0.7	5
85	Longitudinal nonlinear adaptive autopilot design for missiles with control constraint. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2018, 232, 1655-1670.	0.7	5
86	Generalized composite noncertainty-equivalence adaptive control of a prototypical wing section with torsional nonlinearity. <i>Nonlinear Dynamics</i> , 2021, 103, 2547-2561.	2.7	5
87	Variable Structure Control of Decoupleable Systems and Attitude Control of Spacecraft in Presence of Uncertainty. , 1988, , .		4
88	Nonlinear ultimate boundedness control and stabilization of a flexible robotic arm. <i>Journal of Field Robotics</i> , 1992, 9, 301-326.	0.7	4
89	Input-output linearization, zero dynamics stability and nonlinear control of space station. <i>Acta Astronautica</i> , 1993, 29, 417-427.	1.7	4
90	Sliding mode force, motion control, and stabilization of elastic manipulator in the presence of uncertainties. <i>Journal of Field Robotics</i> , 1995, 12, 315-330.	0.7	4

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91	Inverse Force/End-Point Control, Zero Dynamics and Stabilization of Constrained Elastic Robots. , 1993, , .		4
92	Non-linear momentum and attitude control of a Space Station accommodating periodic aerodynamic disturbance. Acta Astronautica, 1995, 35, 391-402.	1.7	3
93	Biologically-Inspired Adaptive Pectoral-Like Fin Control System For CFD Parameterized AUV. , 2007, , .		3
94	Oscillatory Adaptive Yaw-Plane Control of Biorobotic Autonomous Underwater Vehicles Using Pectoral-Like Fins. Applied Bionics and Biomechanics, 2007, 4, 137-147.	0.5	3
95	Adaptive global synchrony of inferior olive neurons. Bioinspiration and Biomimetics, 2009, 4, 036003.	1.5	3
96	Bifurcation of orbits and synchrony in inferior olive neurons. Journal of Mathematical Biology, 2012, 65, 465-491.	0.8	3
97	Feedback Linearization and Control of NASA SCOPE System by Output Feedback. , 1991, , .		2
98	Finite-Time Control of Satellites in Elliptic Orbits Despite Uncertainties Using Solar Radiation Pressure. , 2014, , .		1
99	Adaptive Chebyshev Neural Control of a Multi-Input Aeroelastic System Despite Gust Load. , 2015, , .		1
100	Differential Game-Based Control Law for Stabilization of Aeroelastic System with Gust Load. , 2016, , .		1
101	Robust Finite-Time Control of an Uncertain Aeroelastic System Using Leading-and Trailing-Edge Flaps. Advances in Intelligent Systems and Computing, 2017, , 318-328.	0.5	1
102	Attitude Stabilization of Spacecraft with Flexible Appendages by L1 Adaptive Feedback. , 2017, , .		1
103	Attractive Manifold-Based Noncertainty-Equivalence Adaptive Spacecraft Formation Flying Using Output Feedback. , 2018, , .		1
104	Robust Higher-Order Super-Twisting Control of Aeroelastic System with Unsteady Aerodynamics. , 2018, , .		1
105	Biology-Inspired Robust Dive Plane Control of Non-Linear AUV Using Pectoral-Like Fins. Applied Bionics and Biomechanics, 2010, 7, 153-168.	0.5	1
106	Minimal realizations from MFDs and attitude control of spinning satellite using gyrotorquers. , 1987, , .		0
107	Rotational maneuver and stabilization of an elastic spacecraft. , 1987, , .		0
108	Asymptotically Decoupled Variable Structure Control of Systems and Large Maneuver of Aircraft. , 1989, , .		0

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109	Output Feedback Adaptive Variable Structure Control of Chaos in Lorenz System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 725-730.	0.4	0
110	Adaptive Control of a Nonlinear Prototypical Wing Section with Reduced Order Observer. Journal of Dynamical and Control Systems, 1999, 9, 297-317.	0.4	0
111	Tuning Functions Based Adaptive Synchrony in Inferior Olive Neurons. , 2011, , .		0
112	Adaptive Output Feedback Control of the IPMC Propelled Vehicle With Unknown High Frequency Gain Matrix. , 2011, , .		0
113	Chebyshev Neural Noncertainty-Equivalent Adaptive Control of Wing Rock of Slender Delta Wings. , 2013, , .		0
114	Immersion and Invariance Based Solar Pressure Adaptive Output Feedback Satellite Attitude Control. , 2014, , .		0
115	Synchronization of inferior olive neurons via $L_1$ adaptive feedback. Nonlinear Dynamics, 2014, 78, 467-483.	2.7	0
116	Multi-Input Higher-order Sliding Mode Control of Aeroelastic Systems With Uncertainties and Gust Load. , 2014, , .		0
117	Solar Pressure Variable Structure Model Reference Adaptive Spacecraft Attitude Control in Elliptic Orbits. , 2015, , .		0
118	Robust Output Feedback Attitude Control of Spacecraft Using Solar Radiation Pressure. Advances in Intelligent Systems and Computing, 2015, , 9-15.	0.5	0
119	Passification-Based Adaptive Control of Spacecraft with Elastic Appendages. , 2020, , .		0
120	Composite Immersion and Invariance-Based Adaptive Wing-Rock Motion Control. , 2020, , .		0
121	Adaptive Servoregulation of a Projectile Fin Using Piezoelectric Actuator. , 2005, , .		0